

## CLAIMS:

1. A communications network (1) comprising
  - a plurality of network nodes (2), which include each a synchronization circuit (5) for generating a global clock signal from a local clock signal (LT) formed by a clock generator (4) in dependence on a time of reception of a message,
  - 5 - a divider arrangement (8) included in the synchronization circuit, for dividing the local clock signal in dependence on at least one divider factor produced by a scaler arrangement (9), and a correction term (KT), and
  - a comparator circuit (10) for forming the correction term by comparing the time of reception of a message and of the local clock signal LT,
  - 10 characterized in that the synchronization circuit (5) comprises a divider control (7), which is provided for changing at least one divider factor when the correction term (KT) exceeds a predefined first threshold.
- 15 2. A communications network as claimed in claim 1, characterized in that the divider control (7) includes a control unit (12) which is provided for applying a control signal to a divider factor generator (13) included in the divider control (7) when the correction term exceeds the predefined first threshold and in that the divider factor generator
- 20 (13) is provided for changing the divider factors when the control signal occurs.
3. A communications network as claimed in claim 2, characterized in that the synchronization circuit includes a calibration unit (14) which is provided for
- 25 calibrating the divider factors when the correction term (KT) exceeds a predefined second threshold, which is larger than the first threshold.